B. Amendments to the claims

Claim 1(Currently amended): A method for handling a request for a resource, said request being made by applications running on a computer, ~~the~~ said computer being part of a network of computers, said network of computers ~~each computer on said network~~ comprising ~~a~~ host programs, said host programs comprising symbionts, said symbionts encapsulating resources, said method comprising the steps of:

a. ~~said~~ a host program receiving said request for said resource from said applications;

b. said host program contacting a symbiont that encapsulates said resource; and

c. said symbiont performing one of the steps of:

i. serving said request if the load on said symbiont is less than a threshold, lmax;

ii. replicating said resource on said ~~host~~ computer, if the load on said symbiont is more than the threshold, lmax, and the load on all symbionts encapsulating said resource, is more than a threshold, t;

iii. replicating said resource on said ~~host~~ computer, if the load on said symbiont is more than the threshold, lmax, and said host has been redirected more than a predetermined number of times; and

iv. redirecting said request to a replicate if the load on said symbiont is more than the threshold, lmax, and at least one of the symbionts encapsulating said resource has a load less than the threshold, t, and said host has not been redirected more than a predetermined number of times.

Claim 2 (Previously presented): The method according to claim 1, wherein said host program exposes one or more symbionts available on said network to said applications running on said computer.

Claim 3 (Previously presented): The method according to claim 1, wherein said host program exposes said symbionts available on said host program to said network.

Claim 4 (Previously presented): The method according to claim 1, wherein replicates of said resource are connected together.

Claim 5 (Previously presented): The method according to claim 4, wherein said replicates of said resource are connected together in a multiply connected ring.

Claim 6 (Canceled)

Claim 7 (Previously presented): The method according to claim 1, wherein said threshold, Imax, of said symbiont, is lowered to increase the number of replicates according to a predetermined probabilistic measure.

Claim 8 (Previously presented): The method according to claim 1, wherein said threshold, t, of symbionts encapsulating said replicate of said resource, is less than said threshold, Imax of said symbiont.

Claim 9 (Previously presented): The method according to claim 1, wherein said threshold, t, of symbionts encapsulating said replicate of said resource, evolves with time according to a predetermined probabilistic measure.

Claim 10 (Previously presented): The method according to claim 1, wherein said request is redirected to said replicate, encapsulated in a symbiont with the least load.

Claim 11 (Previously presented): The method according to claim 1, wherein said request is redirected to a replicate encapsulated in a symbiont closest to said host.

Claim 12 (Currently amended): A system for handling a request for a resource, said request being made by applications running on a computer, the computer being part of a network of computers, said network of computers ~~each computer on said network~~ comprising ~~a~~ host programs, said host programs comprising symbionts, said symbionts encapsulating resources, said system comprising:

a. means for ~~said~~ a host program receiving said request for said resource from said applications;

b. means for said host program contacting a symbiont that encapsulates said resource; and

c. means for said symbiont replicating said resource onto said ~~host program~~ computer.

Claim 13 (Previously presented): The system according to claim 12, wherein said host program exposes one or more symbionts available on said network to said applications running on said computer.

Claim 14 (Previously presented): The system according to claim 12, wherein said host program exposes one or more symbionts available on said host to said network.

Claim 15 (Previously presented): The system according to claim 12, wherein said replicates of said resource are connected together.

Claim 16 (Previously presented): The system according to claim 15, wherein said replicates of said resource are connected together in a multiply connected ring.

Claims 17-19 (Canceled)

Claim 20 (Previously presented): A method for arranging resources in a network of computers, said computers on said network comprising host programs, said host programs comprising symbionts, said symbionts encapsulating said resources, said method comprising the steps of:

a. connecting resources in the form of a multiply connected ring;

b. replicating a symbiont encapsulating a resource on a host program based on predetermined birthing rules;

c. joining replicate of said resource to said multiply connected ring; and

d. one of said symbionts encapsulating said resource, ceasing to exist from said multiply connected ring based on predetermined death rules.

Claim 21 (Previously presented): The method according to claim 20, wherein said host program exposes one or more symbionts available on said network to applications running on said computer.

Claim 22 (Previously presented): The method according to claim 20, wherein said host program exposes one or more symbionts available on said host to said network.

Claim 23 (Previously presented): The method according to claim 20, wherein replicates of said resource are connected together.

Claim 24 (Previously presented): The method according to claim 23, wherein said replicates of said resource are connected together in a multiply connected ring.

Claims 25-26 (Canceled)

Claim 27 (Previously presented): The method according to claim 20, wherein said step of replicating a symbiont encapsulating a resource based on birthing rules is performed when any one of the following conditions is satisfied:

a. the load on said symbiont is more than a threshold, lmax, and the load on all symbionts encapsulating said resource, is more than a threshold, t; and

b. the load on said symbiont is more than the threshold, lmax, and said host program has been redirected more than a predetermined number of times.

Claim 28 (Previously presented): The method according to claim 27, wherein said threshold, lmax, of said symbiont, is lowered to increase the number of replicates.

Claim 29 (Previously presented): The method according to claim 27, wherein said threshold, t, of symbionts encapsulating said replicate of said resource, is less than said threshold, lmax of said symbiont.

Claim 30 (Previously presented): The method according to claim 27, wherein said threshold, t, of symbionts encapsulating said replicates of said resource, evolves with time according to a predetermined probabilistic measure.

Claim 31 (Previously presented): The method according to claim 20, further comprises the step of:

a. marking one of said symbionts encapsulating said resource, as immortal.

Claim 32 (Previously presented): The method according to claim 20, wherein said step of one of said symbionts encapsulating said resource, ceasing to exist from said multiply connected ring based on predetermined death rules, comprises the steps of:

a. said symbionts checking their loads at regular time intervals; and

b. said symbionts dying if their load is less than a threshold, lmin.

Claim 33 (Previously presented): The method according to claim 32, wherein said time intervals depend on time scale of natural fluctuations in the load on a symbiont.

Claim 34 (Previously presented): The method according to claim 32, wherein said threshold, lmin, depends on the number of said symbionts.

Claim 35 (Previously presented): The method according to claim 31, wherein said symbiont marked immortal never cease to exist.

Claim 36 (Previously presented): A system for arranging resources in a network of computers, said computers on said network comprising host programs, said host programs comprising symbionts, said symbionts encapsulating said resources, said system comprising:

a. means for connecting resources in the form of a multiply connected ring;

b. means for replicating a symbiont encapsulating a resource onto said host based on predetermined birthing rules;

c. means for joining replicate of said resource to said multiply connected ring; and

d. means for one of said symbionts encapsulating said resource, ceasing to exist from said multiply connected ring based on predetermined death rules.

Claim 37 (Previously presented): The system according to claim 36, wherein said host program exposes one or more symbionts available on said network to applications running on said computer.

Claim 38 (Previously presented): The system according to claim 36, wherein said host program exposes one or more symbionts available on said host to said network.

Claim 39 (Previously presented): The system according to claim 36, wherein replicates of said resource are connected together.

Claim 40 (Previously presented): The system according to claim 39, wherein said replicates of said resource are connected together in a multiply connected ring.

Claims 41-43 (Canceled)

Claim 44 (Previously presented): The system according to claim 36, further comprising:

a. means for marking one of said symbionts encapsulating said resource, as immortal.

Claim 45 (Previously presented): The system according to claim 36, wherein said means for one of said symbionts encapsulating said resource, ceasing to exist from said multiply connected ring based on predetermined death rules comprises:

a. means for said symbionts checking their loads at regular time intervals; and

b. means for said symbionts dying if their load is less than a threshold, lmin.

Claim 46 (Previously presented): The system according to claim 45, wherein said time intervals depend on time scale of natural fluctuations in the load on a symbiont.

Claim 47 (Previously presented): The system according to claim 45, wherein said threshold, lmin, depends on the number of said symbionts.

Claim 48 (Previously presented): The system according to claim 44, wherein said symbionts marked immortal never cease to exist.